DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024829 Address: 333 Burma Road Date Inspected: 01-Jul-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Visual Inspection after Blast

OBG Segment 13CW

This QA Inspector performed a preliminary random visual inspection on OBG Segment 13CW, after the grit blast of the interior components of the bottom panel, vertical plate, longitudinal diaphragm, floor beams and side plate at panel point 123 to 124.5 cable side of OBG Segment 13CW. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Visual inspection after the blasting: During random Quality Assurance Visual review of welds located on OBG Segment 14CW, this Quality Assurance Inspector (QA) observed following details:

- At PP124.5:

Seg3015B: Runner tabs to be removed from weld no: Seg3015B-116.

Seg3015B: Temporary attachments to be removed from FB3233A.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Seg3015M: Spatter to be removed. Grinding to be done on the FB I-ribs (at PP124.5) and on the LD3033 after removal of temporary attachments.

- Temporary attachments on VP3015A under RS3473F (between PP123.5 to PP124.5) to be removed. Welding of RS3473F to VP3015A to be done (between PP123.5 to PP124.5).

Visual Inspection after Blast

OBG Segment 14W

This QA Inspector performed a preliminary random visual inspection on OBG Segment 14W, after the grit blast of the interior components of the Edge Plate, Anchor Plate, longitudinal diaphragm, floor beams and side plate of this OBG Segment 14W. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Visual inspection after the blasting: During random Quality Assurance Visual review of welds located on OBG Segment 14W, this Quality Assurance Inspector (QA) observed following details:

- In between PP128 and PP128.3 cross beam side, incomplete welding on side plate (SP3140E) to edge plate (EP3030E).
- At PP128.3 (W) cross beam side, excess weld metal on deck panel longitudinal diaphragm (DP3175A) to Longitudinal diaphragm (LD3048A).
- At PP128.3 (W) cross beam side, cope hope profile need to be corrected on deck panel longitudinal diaphragm (DP3048A) to Floor Beam (FB3344A).
- At PP126 (E) cross beam side, approximately 4mm deep grinding on floor beam (FB3321A) to RS stiffener (X4903G – section D).
- At PP127 (E) cross beam side, incomplete welding on edge beam (EB3057A) to Floor Beam (FB3329A)
- At PP125 (W) cross beam side, scattered porosity observed on Edge Plate (EP3030A) to RS Stiffener (RS3497C) weld. Areas were taped prior to blast and paint.
- At PP125 (W) cross beam side, two locations base metal gouge was visibly observed on the longitudinal diaphragm (LD3048).
- At PP 126, vertical I-rib on FB 3321A to top anchorage plate AP 3022A weld joints SEG3020R-262/263; cope hole need to be corrected.
- At PP 126, weld joint SEG3020R-020 observed as incomplete; need to do welding.
- At PP 125.5, the base metal observed as gouged out near toe of the weld joint SEG3020T-095
- At PP 125.5, cluster porosity observed on weld joint SEG3020T-106.
- At PP 125.5, cope hole observed as sealed by welding on weld joint SEG3020T-329.
- At PP 125.5, cope hole need to be corrected at weld joints FB3319-001-019/020.
- At PP 125.5, the weld joint SEG3020T-295 observed as incomplete at cope hole area of weld joint SEG3020T-334/335.
- At PP 125.5, incomplete welding observed at weld joint SEG3020Z-004.
- Near PP 128.7, base metal observed as gouged out on LD3048A.
- At PP 128.7, base metal observed as gouged out at two locations at cope hole sections of add on weld joints on

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

I-rib X4853E on FB 3348A.

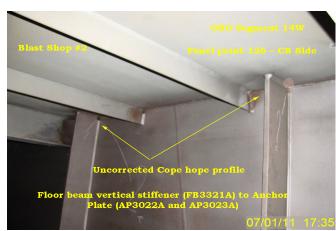
- At PP 128.3 near W4 location, weld joint SEG3020E-015 observed as incomplete.
- For further information, please see the attached picture

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.











Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	Patel, Hiranch	QA Reviewer